

**Meeting of the Central Valley Flood Protection Board
March 27, 2009**

**Draft Staff Report
DWR Floodway Protection Section**

Item

Consider approval of Permit No. 18438 (Attachment A) to abandon and remove existing irrigation pipeline and install a welded steel pipe from the existing pump station along the overflow area of the right (west) bank levee of the Feather River to the waterside toe of the new setback levee; install a welded steel pipe up and over new setback levee; remove distribution box at landside toe of existing Feather River Levee and place fill material on landside slope at upstream end of setback levee.

Applicant

Volcano Vista Farms

Location

The project is located south of Yuba City, approximately one mile northeast of the intersection of Highway 99 and the Garden Highway. (Feather River, Sutter County see Attachment B).

Description

To abandon and remove existing irrigation pipeline and install a 24-inch-diameter, 1,660-foot-long welded steel pipe from the existing pump station along the overflow area of the right (west) bank levee of the Feather River to the waterside toe of the new setback levee; install an 18-inch-diameter, 510-foot-long welded steel pipe up and over new setback levee; remove distribution box at landside toe of existing Feather River Levee and place fill material on landside slope at upstream end of setback levee.

Discussion

This project was originally included in application 18191 which is the LD1 setback levee project. This portion of the original application was removed and resubmitted due to construction and crop irrigation scheduling problems associated with the date of approval (unknown at this time) of a CFR Section 408 request for the setback levee project. With approval of this permit, serious concerns over construction and crop

irrigation scheduling and the ability to construct the setback levee in one season will have been eliminated.

Agency Comments and Endorsements:

- The U. S. Army Corps of Engineers has endorsed this application (Permit Exhibit A).
- LD1 has endorsed this application.

CEQA Findings:

The Board, acting as a responsible agency under CEQA, has independently reviewed the Final Environmental Impact Report (FEIR May 2007) and Levee District 1 of Sutter County Notice of Determination May 2007 (which includes a Statement of Facts, Findings, and Mitigation Measures, Statement of Overriding Considerations, and Mitigation Monitoring and Reporting Program) for the Feather River SetBack Levee at Star Bend (SCN 2006052087) prepared by the lead agency, the Levee District 1 of Sutter County. These documents including project design and City resolutions may be viewed or downloaded from the Central Valley Flood Protection Board website at <http://www.cvpfb.ca.gov/meetings/2009/03-27-2009.cfm> under a link for this agenda item. The Initial Study is also available for review in hard copy at the Board and County offices.

Impacts that can be Mitigated

The following are the significant impacts and the mitigation measures to reduce them to less than significant:

- Hydrology and Water Quality
Construction activities for the proposed project could result in sediment and other construction-related pollutants entering surface water.
 - Contracts shall include stipulations to ensure that contractors for proposed project construction activities obtain National Pollutant Discharge Elimination System (NPDES) General Construction Permits from the Central Valley Regional Water Quality Control Board (CVRWQCB) prior to initiation of ground-disturbing activities. Construction contractors would be prohibited from potentially polluting stormwater entering the Feather River. All construction-related activities that involve fueling, application of lubricants and paints, metal work, or application of any petroleum products shall be forbidden in areas waterside or east of the centerline of the setback levee. These terms shall be administered through contracts with construction contractors and shall be part of the contractors Stormwater Pollution Prevention Plan (SWPPP).

Implementation of the proposed project or in combination with other projects in the Feather River watershed, would expose soil previously used for agriculture to flood flows in the Feather River.

- Before the start of any ground-disturbing construction activity, LD1 or its primary construction contractor shall have a qualified hazardous waste specialist perform a Phase I Environmental Site Assessment of the levee setback area to identify potential sources of surface and buried contaminants, and provide a report of assessment findings.

Operation and maintenance of the proposed project, or in combination with other projects in the Feather River watershed, could result in sedimentation and erosion.

- A post-construction revegetation plan will be prepared to prevent post-construction erosion or sedimentation from entering the Feather River. The post-construction revegetation plan must meet the Central Valley Regional Water Quality Control Board's (CVRWQCB) post-construction BMP standards. Scheduled maintenance and operation of post-construction BMPs must be part of the SWPPP prepared by the construction contractors to meet the standards of the State NPDES General Construction Permit.

Implementation of the proposed setback levee would disrupt local irrigation systems that are located within and adjacent to the existing levee system.

- Contracts shall include stipulations in to ensure that contractors for the proposed project always maintain a back-up supply of irrigation water during the irrigation season whenever irrigation service may be interrupted by the proposed project.
- Modifications to the irrigation lines waterward of the proposed setback levee will eliminate the need to increase the pumping head or pumping capacity of the existing pump facilities. The waterward pump lines be modified in such a manner to maintain the minimum pressure heads required to adequately distribute the irrigation water landward to and beyond the Star Bend area to an equal or better condition than exists with the present pipeline and distribution system. In the event the pipelines cannot be modified to maintain the required minimum pressures, then upgrade the existing pumping facilities to meet the required minimum pressures.
- A new irrigation distribution structure will be constructed along the landside of the new setback levee to replace the existing distribution structure on the landward side of the existing levee. The new structure

shall be equipped with new irrigation valves and piping to connect to the new irrigation piping with the existing piping landward of the proposed setback levee.

- The irrigation distribution lines will be modified landward of the proposed setback levee to an equal or better condition than presently exists. The existing waterlines and ditches landward of the setback levee must be modified in such a manner that existing irrigation practices landward of the proposed setback levee can be maintained by Tudor Mutual Water Company (TMWC) and Volcano Vista Farms.

- Biological Resources

The proposed project would result in the filling or adverse modification of jurisdictional wetland other "waters of the U.S."

- A qualified biologist will conduct a wetland delineation of the project site. This delineation will be submitted to the Corps, and will be verified prior to the issuance of any grading or mining permits from Sutter County for the proposed project. If no state or federal waters are found within the potential disturbance area, then no further mitigation would be required. However, if state or federal waters are found then mitigation includes preserving the maximum amount of existing wetlands and establishing a minimum 25 to 50 foot buffers around all sides of these features. In addition, the final project design shall not cause significant changes to the pre-project hydrology, water quality or water quantity in any wetland that is to be retained on site, except for grading to prevent entrapment of fish. This shall be accomplished by avoiding or repairing any disturbance to the hydrologic conditions supporting these wetlands, as verified through wetland protection plans. Where avoidance of existing wetlands and drainages is not feasible, then mitigation measures shall be implemented for the project-related loss of any existing wetlands on site, such that there is no-net loss of wetland acreage or habitat value. Wetland habitat acreage can be greater than the acreage of wetlands that fall under the jurisdiction of the Corps and/or the RWQCB.

The proposed project could result in the loss of and/or degradation to riparian habitat.

- The loss of riparian habitat will be avoided wherever feasible. Avoidance will be achieved through fencing of areas to be protected with a minimum 50 foot buffer. No construction activities, equipment or materials staging, or any other construction related activities will be allowed within the protected riparian areas or the surrounding buffers. Where avoidance is not feasible, coordinate with the CDFG, USFWS, Corps, California

Department of Parks and Recreation Riparian Restoration and Management Division, and the Department of Water Resources regarding appropriate compensation and on-site restoration procedures for replacement of lost habitat.

The proposed project could result in the loss of valley elderberry longhorn beetle (VELB) or their habitat.

- Consultations with the USFWS will determine mitigation measures for loss of elderberry shrubs. A qualified biologist will identify and map all elderberry shrubs occurring within 100 feet of potential disturbance areas in the project boundaries. The proposed project shall avoid impacts to VELB habitat wherever feasible. Complete avoidance will be accomplished through the creation of a 100 foot setback around any elderberry shrub in the project area with stem diameters of one inch or greater at ground level. The setbacks shall be fenced and flagged to identify equipment and materials encroachment into the setback zone. Fire fuel breaks (disked land) may not be included within the setback. Any ground disturbing activities within 100 feet of elderberry plants with stems measuring 1.0 inch or greater in diameter at ground level shall conform to avoidance measures in accordance with the USFWS Section 7 consultation permitting process.

The proposed project could result in the loss and/or degradation of rare plant populations.

- A qualified biologist will conduct focused surveys for special-status plant species including, but not limited to, rose mallow, during the appropriate time of year (March through June). If any other special-status plant species, including, but not limited to, rose mallow are found during the surveys in areas that cannot be avoided, the project applicant shall notify CDFG within 24 hours so that they can have an opportunity to salvage plants, soil or seed banks, for use in rare plant restoration in mitigation areas.

The proposed project could result in the direct loss or disturbance of nesting birds, including protected raptors, and other migratory birds.

- A qualified biologist to conduct a pre-construction breeding-season survey of the project site to determine if any birds are nesting on or directly adjacent to the project site. In consultation with the CDFG, avoid all birds nest sites located in the project site during the breeding season (approximately March 15 through August 30) while the nest is occupied with adults and/or young.

The floodplains are to be left with topography that allows positive drainage into the river without stranding fish.

- Grading plans for the project will include details that require removal of the existing levee to be conducted in such a manner that once completed, there are no areas that will retain water after flood flows retreat. If it is necessary to leave parts of the levee in place to protect other resources, the surrounding ground should either be filled or sloped to drain towards the river.
- Air Quality: Fugitive dust and emissions during construction will be controlled with best available measures so that the amount of such dust and emissions are reduced.
- Noise: Noise-producing construction activities will be limited to the hours of 7:00 a.m. to 9:00 p.m. Monday through Saturday and 9:00 a.m. to 9:00 p.m. on Sunday, and holidays in areas where sensitive receptors are located. Periodic exceptions to the hours of operation limitations may be granted with prior approval from the Sutter County and prior notice to affected residences.
- Hazards and Hazardous Materials: Prior to construction, a qualified hazardous materials specialist will collect and analyze representative soil samples from any potential onsite borrow sites for the presence of hazardous materials. If soils are found to contain hazardous materials contamination, they shall be disposed of in compliance with federal, state, and local laws and regulations.
- Transportation and Traffic: A traffic safety plan in coordination with Sutter County and Caltrans will be developed and implemented to reduce hazards to vehicles on local roadways.
- Cultural Resources: Work shall be stopped in affected areas if cultural resources are discovered during project construction and appropriate measures will be implemented. The lead agency will consult with a qualified archaeologist or paleontologist to assess the significance of the find. If any find is determined to be significant, representatives of the project proponent and/or lead agency and the qualified archaeologist and/or paleontologist shall meet to determine the appropriate avoidance measures or other appropriate mitigation. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and a report prepared by the qualified archaeologist according to current professional standards and CEQA Guidelines 15064.5.

Based on its independent review of the FEIR Levee District 1 of Sutter County Notice of Determination, filed May 24, 2007, the Board finds that for each of the significant impacts described above, changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effects as identified in the FEIR. Moreover, such changes or

alterations are within the responsibility and jurisdiction of another public agency, the Levee District 1 of Sutter County, and such changes have been adopted by that agency.

Significant Unavoidable Adverse Impacts of the Project

- The proposed project, in combination with other changes in agricultural land uses in Sutter County, would convert Prime Farmland or Farmland of Statewide Importance to nonagricultural use.
- Construction of the proposed project would result in the generation of particulate matter from excavating, grading, trenching, and other construction activities.

The Board further finds that none of the significant unavoidable adverse impacts of the project are within the Board's jurisdiction. The Board also finds that the specific economic, legal, social, technological or other benefits of the project, as listed above, outweigh the unavoidable adverse environmental effects, which are thus considered to be "acceptable."

Statement of Overriding Considerations

Refer to Attachment C for the LD1's Statement of Overriding Considerations. The Board concurs with this Statement.

The Board has independently considered the significant and unavoidable environmental impacts of the proposed project. The Board has also considered the benefits of the project, including increasing the level of flood protection for Sutter County. The Board finds that economic, legal, social, technological, or other benefits of the proposed project outweigh the unavoidable adverse environmental effects of the project, and the adverse environmental effects are considered acceptable when these benefits of the project are considered.

The documents and other materials which constitute the record of the Central Valley Flood Board's proceedings in this matter are in the custody of Jay Punia, Executive Officer, Central Valley Flood Protection Board, 3310 El Camino Ave., Rm. LL40, Sacramento, California 95821.

Section 8610.5 Compliance

1. Evidence that the Board admits into its record from any party, State or local public agency, or nongovernmental organization with expertise in flood or flood plain management:

The Board will make its decision based on the evidence in the permit application and attachments, this staff report, and any other evidence presented by any individual or group.

2. The best available science that related to the scientific issues presented by the executive officer, legal counsel, the Department or other parties that raise credible scientific issues.

The accepted industry standards for the work proposed under this permit as regulated by Title 23 have been applied to the review of this permit.

3. Effects of the decision on the entire State Plan of Flood Control:

This project has no effects on the State Plan of Flood Control.

4. Effects of reasonable projected future events, including, but not limited to, changes in hydrology, climate, and development within the applicable watershed:

None.

Staff Recommendation

Staff recommends that the Board adopt the CEQA findings, approve the permit, and direct staff to file the appropriate CEQA document with the State Clearinghouse.

List of Attachments

- A. Permit
- B. Location maps and photos

DRAFT

STATE OF CALIFORNIA
THE RESOURCES AGENCY
CENTRAL VALLEY FLOOD PROTECTION BOARD

PERMIT NO. 18438 BD

This Permit is issued to:

Volcano Vista Farms
PO Box 9
c/o Michael Churkin
Meridian, California 95957

To abandon and remove existing irrigation pipeline and install a 24-inch-diameter, 1,660-foot-long welded steel pipe from the existing pump station along the overflow area of the right (west) bank levee of the Feather River to the waterside toe of the new setback levee; install an 18-inch-diameter, 510-foot-long welded steel pipe up and over new setback levee; remove distribution box at landside toe of existing Feather River Levee and place fill material on landside slope at upstream end of setback levee. The project is located south of Yuba City, approximately one mile northeast of the intersection of Highway 99 and the Garden Highway (Section 2, T13N, R3E, MDB&M, Levee District 1 Sutter, Feather River, Sutter County).

NOTE: Special Conditions have been incorporated herein which may place limitations on and/or require modification of your proposed project described above.

(SEAL)

Dated: _____

Executive Officer

GENERAL CONDITIONS:

ONE: This permit is issued under the provisions of Sections 8700 – 8723 of the Water Code.

TWO: Only work described in the subject application is authorized hereby.

THREE: This permit does not grant a right to use or construct works on land owned by the Sacramento and San Joaquin Drainage District or on any

other land.

FOUR: The approved work shall be accomplished under the direction and supervision of the State Department of Water Resources, and the permittee shall conform to all requirements of the Department and the Central Valley Flood Protection Board.

FIVE: Unless the work herein contemplated shall have been commenced within one year after issuance of this permit, the Board reserves the right to change any conditions in this permit as may be consistent with current flood control standards and policies of the Central Valley Flood Protection Board.

SIX: This permit shall remain in effect until revoked. In the event any conditions in this permit are not complied with, it may be revoked on 15 day's notice.

SEVEN: It is understood and agreed to by the permittee that the start of any work under this permit shall constitute an acceptance of the conditions in this permit and an agreement to perform work in accordance therewith.

EIGHT: This permit does not establish any precedent with respect to any other application received by the Central Valley Flood Protection Board.

NINE: The permittee shall, when required by law, secure the written order or consent from all other public agencies having jurisdiction.

TEN: The permittee is responsible for all personal liability and property damage which may arise out of failure on the permittee's part to perform the obligations under this permit. If any claim of liability is made against the State of California, or any departments thereof, the United States of America, a local district or other maintaining agencies and the officers, agents or employees thereof, the permittee shall defend and shall hold each of them harmless from each claim.

ELEVEN: The permittee shall exercise reasonable care to operate and maintain any work authorized herein to preclude injury to or damage to any works necessary to any plan of flood control adopted by the Board or the Legislature, or interfere with the successful execution, functioning or operation of any plan of flood control adopted by the Board or the Legislature.

TWELVE: Should any of the work not conform to the conditions of this permit, the permittee, upon order of the Central Valley Flood Protection Board, shall in the manner prescribed by the Board be responsible for the cost and expense to remove, alter, relocate, or reconstruct all or any part of the work herein approved.

SPECIAL CONDITIONS FOR PERMIT NO. 18438 BD

THIRTEEN: Construction between station 14+36.01 and the proposed flow distribution box under this permit shall not occur until the Army Corps of Engineers approves this project under 33USC Section 408. All conditions from Section 408 approval provided by the Corps of Engineers shall be incorporated into this permit as if fully set forth herein if they are not in conflict with the Central Valley Flood Protection Board's regulations (Title 23 California Code of Regulations).

FOURTEEN: All work approved by this permit shall be in accordance with the submitted drawings and specifications except as modified by special permit conditions herein. No further work, other than that approved by this permit, shall be done in the area without prior approval of the Central Valley Flood Protection Board.

FIFTEEN: The permittee shall maintain the permitted encroachment(s) and the project works within the utilized area in the manner required and as requested by the authorized representative of the Department of Water Resources, Levee District 1 or any other agency responsible for maintenance.

SIXTEEN: The permittee shall contact the Department of Water Resources by telephone, (916) 574-1213, and submit the enclosed postcard to schedule a preconstruction conference. Failure to do so at least 10 working days prior to start of work may result in delay of the project.

SEVENTEEN: The permittee shall provide supervision and inspection services acceptable to the Central Valley Flood Protection Board. A professional engineer registered in the State of California shall certify that all work was inspected and performed in accordance with submitted drawings, specifications, and permit conditions.

EIGHTEEN: The Central Valley Flood Protection Board, Department of Water Resources, and Levee District 1 shall not be held liable for any damages to the permitted encroachment(s) resulting from flood fight, operation, maintenance, inspection, or emergency repair.

NINETEEN: The permittee may be required, at permittee's cost and expense, to remove, alter, relocate, or reconstruct all or any part of the permitted encroachment(s) if removal, alteration, relocation, or reconstruction is necessary as part of or in conjunction with any present or future flood control plan or project or if damaged by any cause. If the permittee does not comply, the Central Valley Flood Protection Board may remove the encroachment(s) at the permittee's expense.

TWENTY: The permittee should contact the U.S. Army Corps of Engineers, Sacramento District, Regulatory Branch, 1325 J Street, Sacramento, California 95814, telephone (916) 557-5250, as compliance with Section 10 of the Rivers and Harbors Act and/or Section 404 of the Clean Water Act may be required.

TWENTY-ONE: The permittee shall be responsible for repair of any damages to the project levee and other flood control facilities due to construction, operation, or maintenance of the proposed project.

TWENTY-TWO: The permittee is responsible for all liability associated with construction, operation, and maintenance of the permitted facilities and shall defend and hold harmless the State of California, or any departments thereof, from any liability or claims of liability associated therewith.

TWENTY-THREE: The permitted encroachment(s) shall not interfere with operation and maintenance of the flood control project. If the permitted encroachment(s) are determined by any agency responsible for operation or maintenance of the flood control project to interfere, the permittee shall be required, at permittee's cost and expense, to modify or remove the permitted encroachment(s) under direction of the Central Valley Flood Protection Board or Department of Water Resources. If the permittee does not comply, the Central Valley Flood Protection Board may modify or remove the encroachment(s) at the permittee's expense.

TWENTY-FOUR: No construction work of any kind shall be done during the flood season from November 1 to April 15 without prior approval of the Central Valley Flood Protection Board.

TWENTY-FIVE: No excavation shall be made or remain in the levee section during the flood season from November 1 to April 15 without prior approval of the Central Valley Flood Protection Board.

TWENTY-SIX: No material stockpiles, temporary buildings, or equipment shall remain in the floodway during the flood season from November 1 to April 15.

TWENTY-SEVEN: During demolition/construction of the project, any and all anticipated or unanticipated conditions encountered which may impact levee integrity or flood control shall be brought to the attention of the Flood Project Inspector immediately and prior to continuation.

TWENTY-EIGHT: In the event existing revetment on the channel bank or levee slope is disturbed or displaced, it shall be restored to its original condition upon completion of the proposed installation.

TWENTY-NINE: Cleared trees and brush shall be completely burned or removed from the floodway, and downed trees or brush shall not remain in the floodway during the flood season from November 1 to April 15.

THIRTY: The pipes shall be placed in the center of an open trench 2 times the diameter of the pipes.

THIRTY-ONE: Pipe installed in the levee section and within 10 feet of the levee toes shall be new steel and at least 7 gauge. Steel pipe shall be corrosion-proofed externally with a coating of coal-tar enamel; asphalt-saturated felt wrap; cement mortar; or PVC or polyethylene tape wrapped to a thickness of 30 mils. Steel pipe shall be corrosion-proofed internally with a continuous lining of cement mortar or asphalt.

THIRTY-TWO: A suitable siphon breaker and protective housing shall be installed on the apex of the pipe and shall be located off the levee patrol road.

THIRTY-THREE: The pipeline shall be tested and confirmed free of leaks by X-ray, pressure tests, or other approved methods during construction or anytime after construction upon request by the Central Valley Flood Protection Board.

THIRTY-FOUR: The invert of the pipe through the levee section shall be above the design flood plane elevation of 64.2 feet, NGV Datum.

THIRTY-FIVE: All pipe joints within the levee section shall be butt welded.

THIRTY-SIX: The pipe shall be installed through the levee section at a right angle to the centerline of the levee.

THIRTY-SEVEN: All abandoned pipes shall be removed from the existing levee section and in the area 10 feet waterward of the waterward toe of the proposed setback levee.

THIRTY-EIGHT: The pipe shall be buried at least 24 inches below the levee slopes and 24 inches below the levee crown.

THIRTY-NINE: The pipe within the overflow area shall be buried with a minimum of 2 feet of cover.

FORTY: Backfill material for excavations in the area 10 feet waterward of the waterward toe of the proposed setback levee shall be placed in 4- to 6-inch layers and compacted to at least the density of the adjacent, firm, undisturbed material.

FORTY-ONE: Backfill material for excavations within the levee section and within 10 feet of the levee toes shall be placed in 4- to 6-inch layers, moisture conditioned above optimum moisture content, and compacted to a minimum of 90 percent relative compaction as measured by ASTM Method D1557-91.

FORTY-TWO: Density tests by a certified materials laboratory will be required to verify compaction of

backfill within the levee section and within 10 feet of the levee toes.

FORTY-THREE: Location markers shall be placed near both levee toes for the buried pipe not surfacing near the levee toes.

FORTY-FOUR: All debris generated by this project shall be disposed of outside the floodway and off the levee section.

FORTY-FIVE: Upon completion of the project, the permittee shall submit as-built drawings to: Department of Water Resources, Flood Project Inspection Section, 3310 El Camino Avenue, Suite LL30, Sacramento, California 95821.

FORTY-SIX: In the event that levee or bank erosion injurious to the adopted plan of flood control occurs at or adjacent to the permitted encroachment(s), the permittee shall repair the eroded area and propose measures, to be approved by the Central Valley Flood Protection Board, to prevent further erosion.

FORTY-SEVEN: If the project, or any portion thereof, is to be abandoned in the future, the permittee or successor shall abandon the project under direction of the Central Valley Flood Protection Board and Department of Water Resources, at the permittee's or successor's cost and expense.

FORTY-EIGHT: The permittee shall comply with all conditions set forth in the letter from the Department of the Army dated March 26, 2009, which is attached to this permit as Exhibit A and is incorporated by reference.



DEPARTMENT OF THE ARMY
U.S. Army Engineer District, Sacramento
Corps of Engineers
1325 J Street
Sacramento, California 95814-2922

REPLY TO
ATTENTION OF

Flood Protection and Navigation Section (18438)

MAR 26 2009

Mr. Jay Punia, Executive Officer
Central Valley Flood Protection Board
3310 El Camino Ave., Room LL40
Sacramento, CA 95821

Dear Mr. Punia:

We have reviewed a permit application by Volcano Vista Farms (application number 18438). This project includes abandoning portions and removing portions of an existing irrigation pipeline and installing a 1,660-foot long, 24-inch diameter welded steel pipe from an existing pump station on the waterside of the right bank levee of the Feather River to the waterside toe of the new setback levee (permit number 18191). One 18-inch diameter welded steel pipe (a maximum of 510 linear feet) is proposed to be installed from the waterside toe of the new setback levee, up and over the levee, to the new flow distribution box landward of the new setback levee. This project is located near the eastern boundary of Sutter County along the right bank of the Feather River at Star Bend Road, at 39.0113°N 121.5975°W NAD83, Sutter County, California.

The District Engineer has no objection to approval of this application by your Board from a flood control standpoint, subject to the following conditions:

- a. That in the event trees and brush are cleared, they shall be properly disposed of by either complete burning or complete removal outside the limits of the project right-of-way.
- b. That any debris generated by this project shall be disposed of outside the limits of the project works.
- c. That no work shall be performed and no stockpiles of material or equipment shall remain in the floodway during the flood season of November 1 to April 15, unless otherwise approved in writing by your Board.
- d. That the removed portion of pipe, appurtenances, foundations, and tie-downs, shall be completely removed from the project right-of-way. Backfill shall be satisfactory levee material compacted to a minimum 95% ASTM D 698.

e. That the proposed pipeline shall be clearly marked in the field such that its location can be easily established in a flood event/emergency repair action.

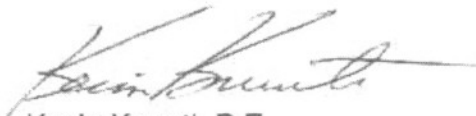
f. That in the event of forecasted high water, the applicant shall have a plan in place to prevent scour when the trench is open.

g. That construction between station 14+36.01 and the proposed flow distribution box shall be addressed with the Section 408 process for the Star Bend setback levee. Construction of this work shall not be allowed until Section 408 approval is obtained.

Based upon the information provided, no Section 10 or Section 404 permit is needed.

If you have any questions concerning our comments on this permit application, please contact Mr. Ryan Larson at (916) 557-7568 or Mr. Robert Murakami at (916) 557-6738.

Sincerely,



Kevin Knuuti, P.E.
Chief, Engineering Division

Copy Furnished:

Mr. Jeremy Arrich, Chief, Flood Project Integrity and Inspection Branch,
3310 El Camino Avenue, Suite LL30, Sacramento, CA 95821

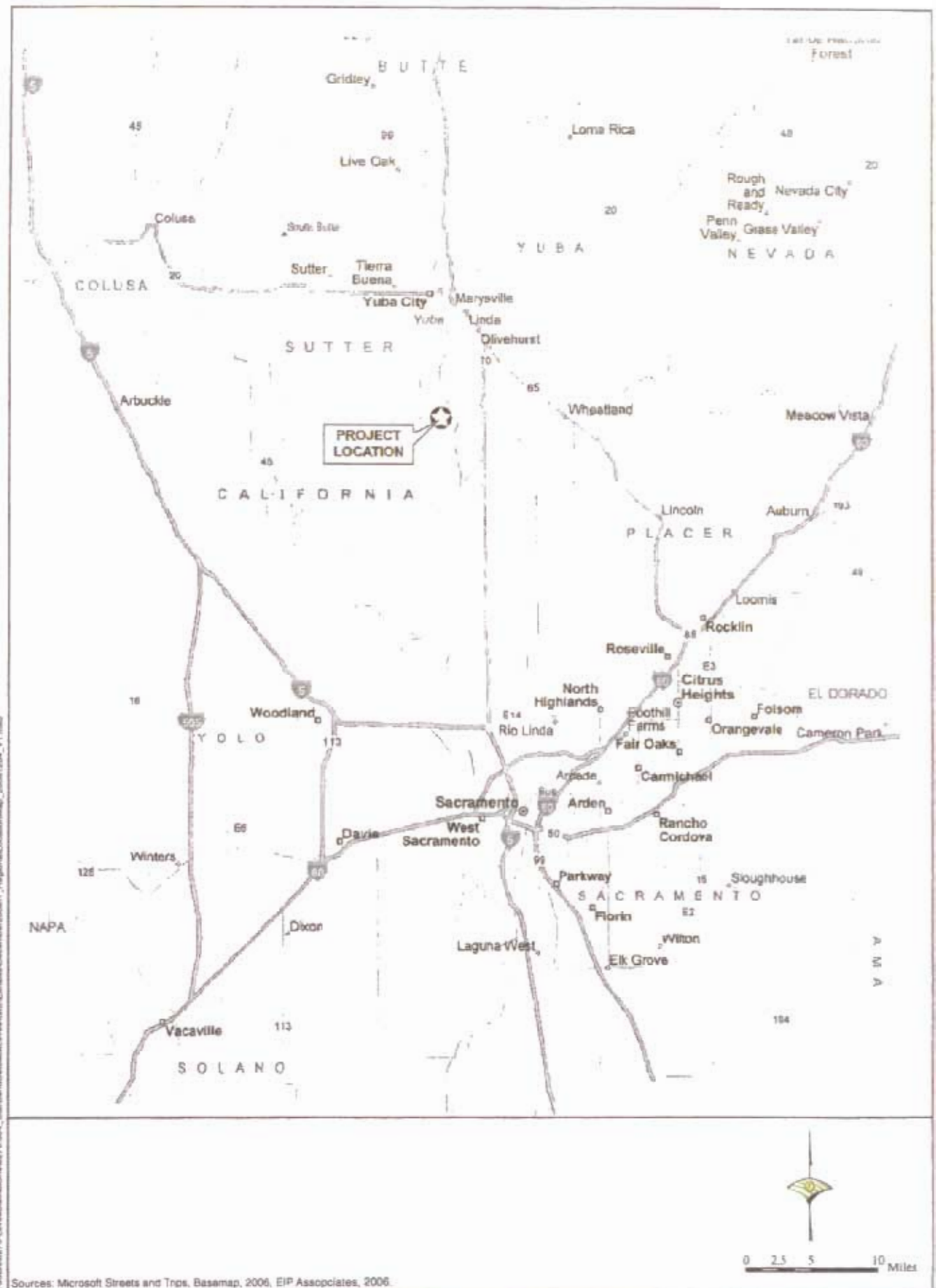


Figure 1. Regional Location Map.

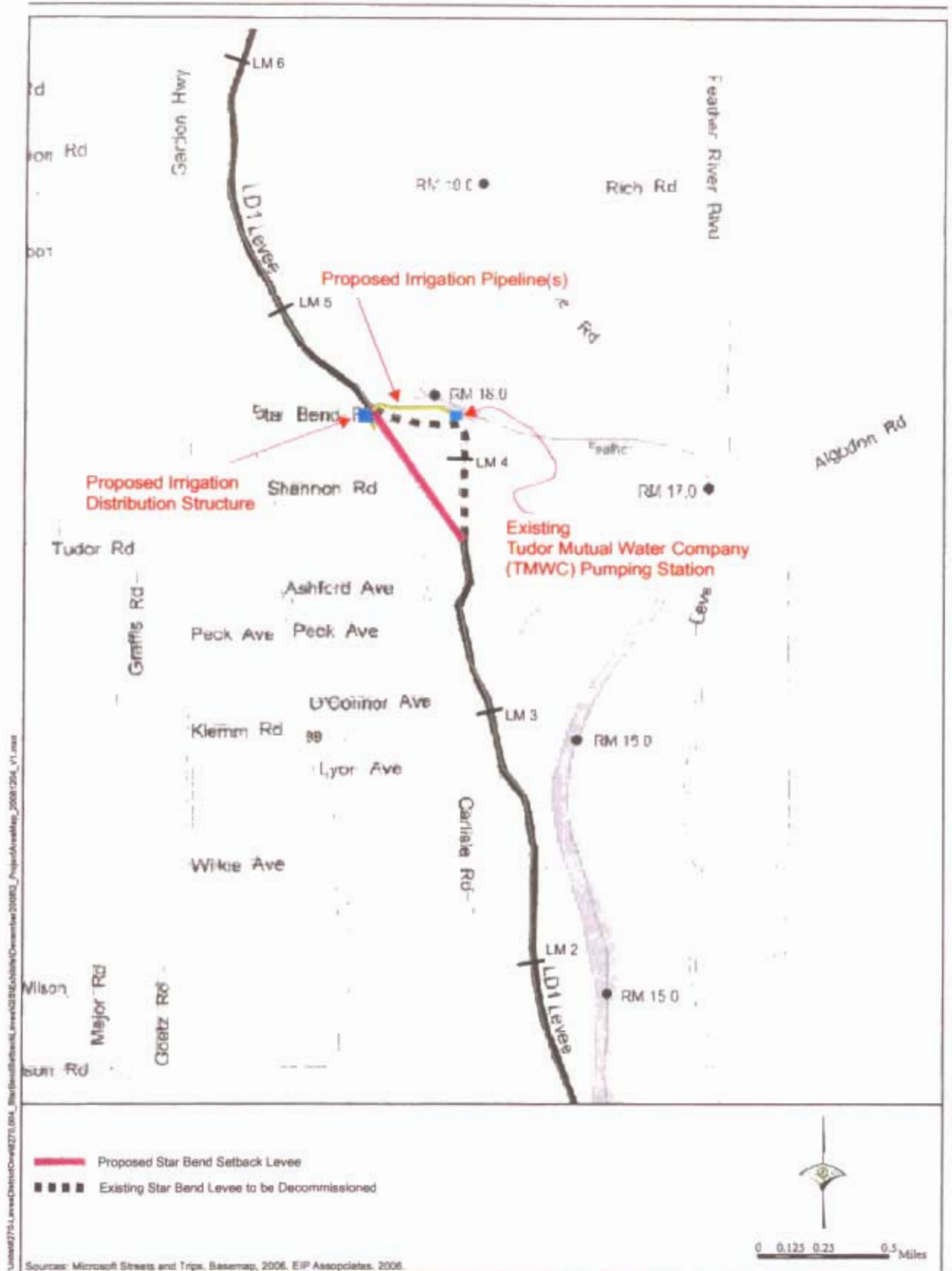


Figure 2. Star Bend Setback Levee Irrigation System Modifications.

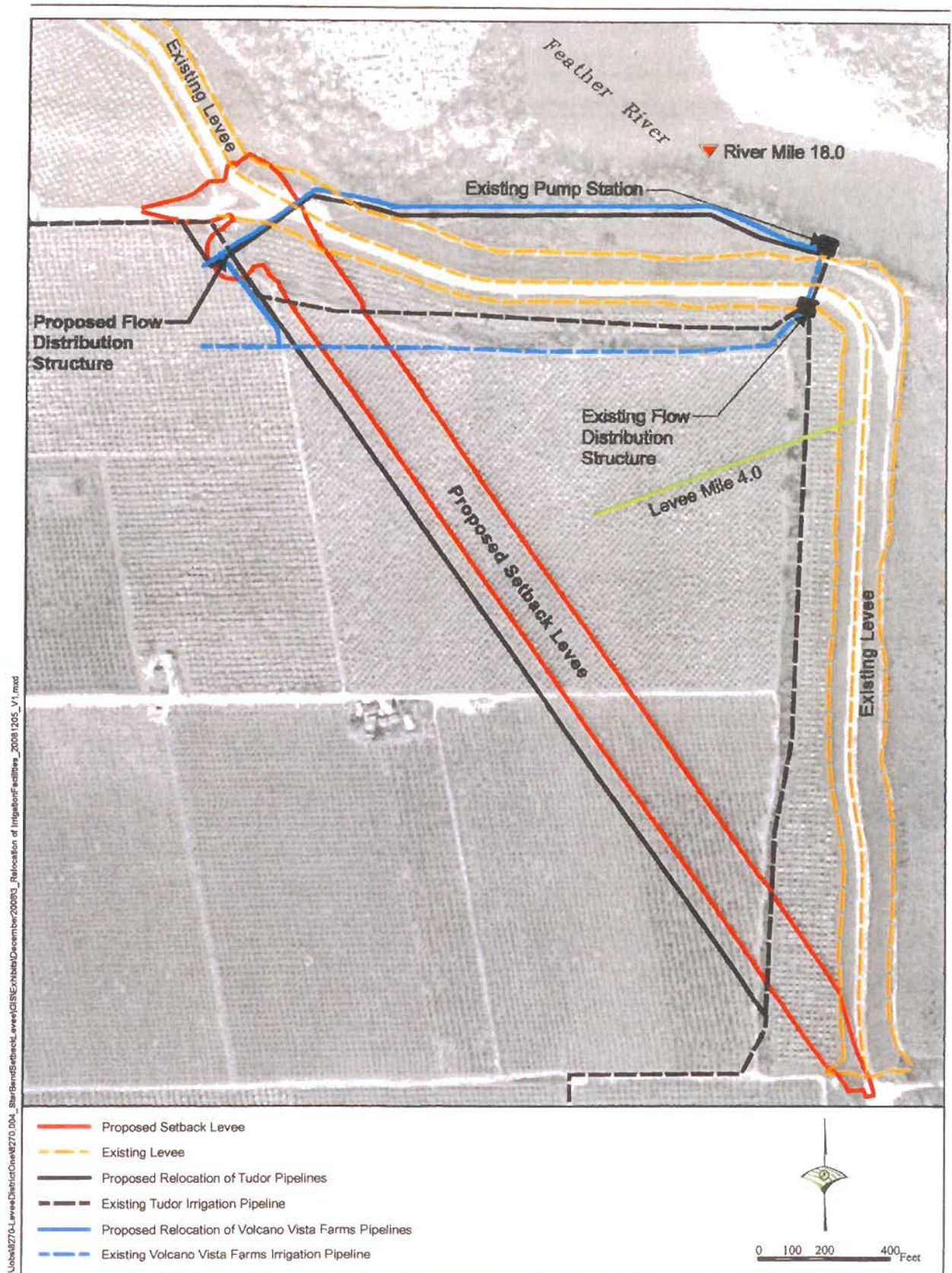


Figure 3. Relocation of Existing, Non-Federal Irrigation Facilities at Star Bend.